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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/766,295

01/27/2004

Guy E. Horne JR.

02579-P0027B

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02/28/2008

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EXAMINER

KASZTEJNA, MATTHEW JOHN

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

02/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/766,295	<b>Applicant(s)</b> HORNE ET AL.	
	<b>Examiner</b> MATTHEW J. KASZTEJNA	<b>Art Unit</b> 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Notice of Amendment***

In response to the amendment filed on December 3, 2007, amended claims 1 and 13 are acknowledged. The current rejections of the claims are *withdrawn*. The following new grounds of rejection are set forth:

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,275,152 to Krauter et al. in view of U.S. Patent No. 6,749,560 to Konstorum et al. in further view of U.S. Patent No. 6,540,669 to Abe et al.

**In regard to claims 1-3, 6-7 and 10-13**, Krauter et al. disclose an endoscope insertion shaft comprising: a tubular member 15, and a sheath comprising at least the following layers: a braided layer 23 and a laminating layer 24, wherein the braided layer jackets the continuous wall of said tubular member; and a barrier layer 22 comprising a polyester wrap is disposed between the continuous wall of said tubular member and the braided layer and jackets the tubular member to form a seal therebetween along the length of the tubular member (see Figs. 2 and 4 and Col. 3, Lines 40-67). Krauter et al. are silent with respect to the tubular member including a continuous wall to form a closed interior and wherein the wall includes at least one aperture for increasing

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flexibility. Konstorum et al. disclose an analogous endoscope 10 having a shaft 14 comprised of a frame 26 and a cover 32 (see Figure 1). Frame 26 comprises a tube 40 that is preferably formed from a shape memory alloy material, such as Nitinol (see col. 3, lines 10-25). Tube 40 has slots 46 along at least part of its length where the pattern of slots can be varied and sections of slot patterns are provided, to vary the flexibility of the tube 40 (see col. 3, lines 29-51). The slots 46 provide the tube 40 with increased flexibility along the length of the first section 52 of the tube 40 (see col. 4, lines 1-5). It would have been obvious for one of ordinary skill in the art at the time the invention was made to replace the helical tubular member of Krauter et al. with a continuous wall tubular member to provide an easily manufactured one-piece tube with adequate column strength, flexibility and torque resistance to be inserted into a patient's body as taught by Konstorum et al.

In further regard to claim 1, Krauter et al. fail to teach an outer most wear layer in the sheath 23, 24. Abe et al. teach of an analogous endoscope having an outer cover 3 formed into a laminated structure which includes an inner layer 32, an intermediate layer 33 and an outer layer 34. The outer layer 34 is preferably formed of a material having chemical resistance (see Fig. 5 and Col. 11, Line 58 – Col. 12, Lines 30). It would have been obvious for one of ordinary skill in the art at the time the invention was made to include an outer “wear layer” in the sheath of Krauter et al. to provide a cover that will suffer very little degradation even over repeated cleaning and sterilization as taught by Abe et al.

**In regard to claims 4-5**, Krauter et al. are silent with respect to wherein the first set of apertures comprises at least one elongated aperture having an axis oriented at an angle to the axis of the tubular member and wherein the angle is in the range from zero to ninety degrees. Figure 3 of Konstorum et al. shows that the slots 46 are positioned along a line parallel to the axis of the tube 40 and have an axis oriented at an angle to the axis of the tubular member, where the angle is in the range from zero to ninety degrees. Figure 3 also shows that the slots 46 are circumferentially positioned on the tube 40. It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the endoscope of Krauter et al. with various patterns of apertures in order to vary the flexibility of the tube to a desired stiffness as taught by Konstorum et al.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-7 and 10-13 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. KASZTEJNA whose telephone number is (571)272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J. K./  
Examiner, Art Unit 3739

/Linda C Dvorak/  
Supervisory Patent Examiner, Art  
Unit 3739

2/19/08